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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/726,741	12/03/2003	James E. Rouleau	60,408-387	5833
27305	7590	09/07/2005	EXAMINER	
HOWARD & HOWARD ATTORNEYS, P.C. THE PINEHURST OFFICE CENTER, SUITE #101 39400 WOODWARD AVENUE BLOOMFIELD HILLS, MI 48304-5151			BARRETT, SUZANNE LALE DINO	
			ART UNIT	PAPER NUMBER
			3676	

DATE MAILED: 09/07/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/726,741	ROULEAU, JAMES E.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Suzanne Dino Barrett	3676	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 03 December 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-32 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-32 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 03 December 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)               | Paper No(s)/Mail Date. _____  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>3/17/04</u> .   | 6) <input type="checkbox"/> Other: _____                                    |

## **DETAILED ACTION**

### ***Drawings***

1. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: 32 and 34 in Figures 4A and 4B as discussed on page 9, paragraph [0020]. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Specification***

2. The abstract of the disclosure is objected to because of the word "invention" in line 1. Correction is required. See MPEP § 608.01(b).

### ***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

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The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claims 1-32 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

The specification and drawings are confusing with regard to the worm gears and worms used in the different embodiments. It appears that Applicant has comingled the reference numerals from different embodiments when setting forth the worm gear structure and arrangement. In the specification, page 9, lines 13,16,17,50,52 especially, the worm and worm gears 32,34 do not appear in Figures 4A,4B as stated.

Furthermore, Figures 1 and 2 show elements 32,34, but these do not appear to be the same worm gear arrangement shown in Figures 3 (which shows worm 50 and gear 52) and 4. Accordingly, the worm gear and worm structures 32,34 and 50,52 are not clearly understood. In addition, it is not understood exactly how the release drive rotates the steering column in the embodiments of Figures 2 and 3 to reduce the load, as discussed on pages 12-13, paragraph [0025]. In the Figure 2 embodiment, it seems that the worm gear 52 with holes 54 to receive the lock bolt 18 is rotated, not the steering column itself. And in the Figure 3 embodiment, since the bolt engages the column directly, it is not clear how the release mechanism rotates the column.

Futhermore, it is unclear, in view of the recitation in claims 1,20 and 29 especially,

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whether a load is deliberately imparted to the lock bolt, or just as a known circumstance of these types of locks as discussed in the specification. The claim language appears to recite a deliberate load imparted to the lock bolt and it is not understood why this would be done, given the contrary discussion in the specification.

***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 1, 16-32, as best understood, are rejected under 35 U.S.C. 102(e) as being anticipated by Dimig et al 6,571,587. Dimig et al teach a steering column locking device comprising a lock bolt 14 arranged to engage either the steering column or an apertured gear affixed to the column (see col. 4, lines 30-40), an actuator 18 such as an electric, hydraulic or pneumatic motor (of any type as disclosed in col. 6, lines 30-36), and a worm and worm gear arrangement (of any type as disclosed in col. 6, lines 9-19) connected to the actuator to retract the lock bolt 14, and further including a release drive means for reducing the load on the lock bolt via a cam arrangement 32/38 in order to allow smooth retraction of the bolt when it is binding in the steering column or gear aperture. See col. 7, lines 43-50; col. 8, lines 10-15, 24-40; col. 12, lines 18-24, 53-60.

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Dimig et al also teach the use of sensors and a controller to activate the cam release drive (col. 10). It is noted that the method steps recited in claims 20-28 are considered inherent to the use of the Dimig device.

***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 2-15, as best understood, are rejected under 35 U.S.C. 103(a) as being unpatentable over Dimig et al 6,571,587 in view of Bennett et al 5,862,886. Dimig et al teach the steering column lock described above, but fail to specify a load reduction means in which the steering column or apertured gear plate are rotated by the release drive means, as set forth in claim 2, especially. Bennett et al teach a load reduction system for a lock bolt 37 on an elevator car (the locked device), comprising load sensors 62,63 and motor and worm gear drive means 43,44, wherein the mechanism is pre-torqued before retraction of the bolt 37 in order to prevent binding of the bolt within the floor landing keeper 39, by activating the car hoisting motor to raise or lower the car a sufficient distance, to reduce the load on the bolt and release the binding effect. It would have been obvious to one of ordinary skill in the art to modify the load reduction means of Dimig et al by providing a movement of the steering column (the locked device) or apertured gear plate thereon to release the load on the lock bolt engaged

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therein, as taught by Bennett et al as an alternate means of mechanically effecting the release means that are currently practiced manually by drivers in rotating the steering wheel to release the binding effect on the lock bolt.

### ***Conclusion***

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Note, especially, Blow '326, Hackl '429, Ross '238, Garnault '067; also the cam load reducing devices of Feucht et al '476 and Watanaki '577, Zillman, Suzuki.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Suzanne Dino Barrett whose telephone number is 571-272-7053. The examiner can normally be reached on M-Th 8:30-7:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Glessner can be reached on 571-272-6843. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read 'SDB', is positioned above the printed name of the examiner.

Suzanne Dino Barrett  
Primary Examiner  
Art Unit 3676

sdb